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Drudgery Experiences of Gender in Crop Production Activities

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ABSTRACT Gender studies are predominantly undertaken to identify the gender gaps as per the development issue and work towards equalizing the development benefits. Drudgery of gender in crop activities has been the issue of concern for delivering technology benefits among them. The present study is an attempt to obtain and analyze the gender prioritized drudgery experiences in crop production activities through a sample survey of two hundred farmers distributed equally by gender. The survey was conducted in five adopted villages of Chevella mandal, Andhra Pradesh in the year 2007-08. Results of the study highlighted that drudgery in crop activities were differently prioritized men and women. The principal factors contributing to the set priorities are found as work demand on time and posture at work for men and work demand on time, posture, work exertion, perceived difficulty and work load for women. The results guide in selection of suitable technology that can reduce the factors of drudgery.

INTRODUCTION

Drudgery is a term used to represent the dissatisfactory experiences that constrain work performance in any activity (Technical module/ AICRP- FRM/ DRWA/ 2009). A vast majority of rural women in India take part in agricultural field operations. Study on their drudgery experiences in crop production activities is multidimensional as there is excessive reliance on manual labor in this sector. Improved productivity and health are expected benefits out of drudgery reduction programmes conducted through technology interventions. Therefore, there is need to select suitable technologies guided by identified drudgery experiences. It is here a bench mark survey was undertaken by All India Coordinated Research Project on Home Science during the year 2007-08. The objectives of the survey are:
1. To obtain gender experiences on drudgery related to different crop production activities.
2. To analyze the gender differences in drudgery experiences.

Review of Literature

The published report of AICRP in Home Science, ICAR (2001) for the plan period 1996 - 2001 brought forth the results of survey conducted on 7700 farm women in 9 states of India, assessing drudgery on basis of time consumed in agriculture and allied activities. It was reported that weeding (1110 hrs/ year), transplantation (591 hrs/ year), cutting and uprooting (493 hrs / year), threshing (737 hrs/ year) were drudgery prone among farm activities due to their time consumption and difficulty perceived on 5 point rating scale.

Mrunalini et al. (1999) observed the correlations between the factors *viz.* time and perceived difficulty influencing drudgery index. A high positive correlation was observed between difficulty score and drudgery index in household routine tasks (0.88) compared to temporal cost and drudgery index. This lead to an inference that difficulty score experienced can be taken as an indicator of drudgery.

Mrunalini et al. (2000) in a study conducted on silkworm rearing activities revealed that preparation of leaf for feeding the worms was the most drudgery prone as per drudgery Index calculated on linear combination method considering time, difficulty perception and frequency of performance as variables.

METHODOLOGY

Five adopted villages namely, Malkapur, Palgutta, Kandawada, Kesaram and Ibrahimpally were selected as the study area. Sample size for the survey was kept uniform in either gender. Respondents were selected by following proportionate random sampling method based on farming category. Through a standardized schedule, information on the prevailing crops grown, gender role division among the crop activities and work related drudgery experiences were collected. Subjective rating scales were used on five point continuum to elicit on gender role division in crop activities. Subjective rating scales on six parameters *viz.* work demand as per time, feeling of exhaustion, feeling on postures assumed

in work, and feeling on manual loads operative, difficulty perception and work load perception were used to elicit the drudgery experiences. Each respondent was interviewed and obtained data for compilation.

RESULTS AND DISCUSSION

1. Respondents

Respondents included in the survey were in the age range of 25 - 40 years and are associated with farming since teenage**.** Ninety per cent of women and sixty per cent of men were illiterate while remaining had education up to secondary level. Table 1 depicts the distribution of respondents as per farming category.

Table 1: Distribution of respondents as per farming category

Farming category	*Men*	*Women*	*Total*
Big farmers	5	5	10
Medium farmers	10	10	20
Small farmers	20	20	40
Marginal farmers	30	30	60
Farm labor	35	35	70
All categories	100	100	200(N)

2. Crops Grown in the Adopted Villages

Mixed cropping system was found to be followed in the villages surveyed. Among the cereal crops, paddy is grown for family consumption by 50 percent farmers who have wet lands and irrigation resource. Sorghum or maize is the millet crop grown in dry lands intercropping with pulses like red gram or alternated with Bengal gram by another 60 percent farmers. Amongst the oilseeds, sunflower or cotton are grown by 30-40 percent of farmers. A large majority of 80 percent farmers grow vegetables and seasonal flowers through out the year for commercial purpose.

3. Gender Role Division in Crop Activities

Table 2 brings out the gender division of roles among the crop activities in the adopted villages. Preparatory tillage, manuring and fertilizing; sowing, transplanting, weeding, intercultivation, spraying, harvesting, threshing, processing, storage and marketing were the crop activities considered for the purpose.

Table 2 also clearly indicates that the role of women in crop production is dominant by their total share in activities. This is due to the fact that 37 per cent of activities are performed by women either exclusively or by their domination of number. Where as the men exclusive or domination by number is seen in only 26 per cent of crop activities.

Table 2: Gender role divisions among crop activities

Gender role division	*Percentage of farming operations in a crop cycle*
Women exclusive division	14
Women dominant	23
Women and men equally	37
Women subordinate	9
Men exclusive division	17

4. Drudgery Experiences of Gender

Table 3 depicts the crop activities ranked as per priority by men and women based on drudgery experienced**.** Data in table 3 highlight men ranked marketing, preparatory tillage and manuring and fertilizing as the three most drudgery prone activities as per rank order priority. Women on the other hand ranked harvesting, weeding intercultivation and threshing as the drudgery prone tasks as per priority. The rank correlation coefficient showed highly negative correlation confirming that men and women differed greatly while setting priority among crop activities as per drudgery experienced. This shows that technology intervention packages have to be separately formulated as per gender priorities in order to reduce their drudgeries.

Table 3: Crop activities prioritized by men and women as per drudgery

Crop activities	*Men*		*Women*	
	Drudgery score	*Rank*	*Drudgery score*	*Rank*
Preparatory tillage	22	2	7	7
Manuring and fertilizing	20	3	15	4.5
Sowing/ Transplanting	13	4	15	4.5
Weeding and interculti-vation, Spraying	6	7	20	2
Harvesting	9	6	21	1
Threshing and Value Processing	12	5	18	3
Marketing	24	1	11	6

Spearman's' rank correlation(ñ) = - 0.8771

5. Factors Contributing to Work Related Drudgery in Men and Women

The subjective ratings given by men and

women on different factors contributing to drudgery and their rank order priority are given in table 4. As per data in table 4 both men and women found work is demanding on time and this factor is ranked as first to contribute to their drudgery experiences. Manual loads to operate are found as second in order of priority contributing to drudgery by men followed by feeling of exhaustion and postural discomfort. Women, on the other hand, gave equal priority to rest of all factors. The coefficient of correlation was found to be positively correlated but to a lesser extent. The results of the study are in conformity with the survey results reported by AICRP in Home Science (2001) highlighting temporal costs of activity is the dominating drudgery factor. This indicates that the efforts to reduce drudgery through technology interventions shall greatly focus on reduction of time and manual loads for men. While time factor shall remain as the core factor to reduce drudgery for women , the other factors stated such as feeling of exhaustion , postures, difficulty perception, work load perception are also have to be reduced by giving equal emphasis during technology interventions. Therefore, time and labor saving technologies used in harvesting such as improved sickles, harvest bags, vegetable harvesting knives/ cutters, push and pull or rotary weeders, threshing and cleaning equipment etc. comprise as suitable technology to reduce drudgery of women in harvesting, weeding and threshing operations. Men require stubble collectors, seed and fertilizer drills, improved storage provisions for marketing under technology package for reducing drudgery.

Table 4: Factors contributing to work related drudgery in men and women

Crop activities	*Men*		*Women*	
	Mean score	*Rank order*	*Mean score*	*Rank order*
Work demand on time	3.14	1	2.71	1
Feeling of exhaustion	2.29	3.5	2.57	4
Posture assumed in work	2.29	3.5	2.57	4
Manual loads operative	2.43	2	2.57	4
Difficulty perception on work process	2.14	5.5	2.57	4
Work load perception as per endurance	2.14	5.5	2.57	4

Spearman's' rank correlation(ñ) = 0.6052

CONCLUSIONS

The study clearly brings out that women are still taking dominant role as Gender division in crop production activities. Crop activities prioritized on drudgery by men are distinctly different to women. The study attempted to understand the different factors actively contributing to drudgery of women and hence six variables that are highly sensitive to drudgery feeling such as work demand per time, feeling of exhaustion, postures, manual loads operative, difficulty perceptions, work load perception were considered. Among all the variables, it was found that women and men agreed to the factor *viz.* work load on time as principle contributing factor to drudgery at work. Gender showed low positive correlation with other factors contributing to their drudgery. The results, therefore, guide that technologies that are selected for intervention for reducing drudgery shall be fundamentally time saving. Further, they shall facilitate women in relieving them from postural stress, feeling of exhaustion and difficulty. Technologies selected for men shall reduce manual load of work.

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